

MOBILE HOME COUNTRY COURT (PWS 5160032) SOURCE WATER ASSESSMENT FINAL REPORT

September 27, 2002



State of Idaho Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This assessment is based on a land use inventory of the designated assessment area, sensitivity factors associated with the wells, and aquifer characteristics.

This report, *Source Water Assessment for the Mobile Home Country Court, Burley, Idaho* describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Mobile Home Country Court(PWS #5160032) water system consists of one well. The well is located on the west side of Highway 27 approximately 3.5 miles south of the city of Burley. The system currently serves approximately 50 people through 22 connections.

Final susceptibility scores are derived from equally weighing system construction scores, hydrologic sensitivity scores, and potential contaminant/land use scores. Therefore, a low rating in one or two categories coupled with a higher rating in other categories results in a final rating of low, moderate, or high susceptibility. With the potential contaminants associated with most urban and heavily agricultural areas, the best score a well can get is moderate. Potential Contaminants/Land Uses are divided into four categories, inorganic contaminants (IOCs, e.g. nitrates, arsenic), volatile organic contaminants (VOCs, e.g. petroleum products), synthetic organic contaminants (SOCs, e.g. pesticides), and microbial contaminants (e.g. bacteria). As different wells can be subject to various contamination settings, separate scores are given for each type of contaminant.

In terms of total susceptibility, the well rated automatically high for IOCs, VOCs, SOCs, and microbial contaminants(Table 2). The automatically high ratings are due to the sanitary setback distance of 50 feet not being kept clear of all potential contaminants (irrigation canal 25 feet away, paint and antifreeze stored in the well house, herbicide sprayed on canal bank and in garden), a septic tank existing within 100 feet of the well, a detection (November 1993) of antimony above its maximum contaminant level (MCL), and detections of total coliform and E.coli in the well. System construction rated high, hydrologic sensitivity rated moderate, and land use scores were high for IOCs, moderate for VOCs, high for SOCs, and low for microbial contaminants(Table 2).

No VOCs have ever been detected in the well or it's distribution system. Trace amounts of the IOCs barium, chromium, and fluoride have been detected in tested water, but significantly below MCLs. A detection of the SOC aldrin, a banned insecticide used in corn, occurred in November 1993 in concentrations of 1.33 parts per billion (ppb). EPA has not set an MCL for aldrin. The well exists in a county of high nitrogen fertilizer, herbicide, and agricultural chemical use. In addition, the well's delineation crosses a priority area for the pesticide atrazine and the IOC nitrate. Despite regional nitrate use, tested well water has only detected concentrations between 2.94 and 3.72 parts per million (ppm), significantly below the MCL of 10ppm.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific purpose.

For Mobile Home Country Court, drinking water protection activities should first focus on maintaining the requirements of the sanitary survey (an inspection conducted every five years with the purpose of determining the physical condition of a water system’s components and its capacity). Any spills from the potential contaminant sources listed in Table 1 of this report should be carefully monitored, as should any future development in the delineated areas. Other practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water area should be implemented. No chemicals should be stored or applied within the 50-foot radius of the wellhead. As most of the designated areas are outside the direct jurisdiction of Mobile Home Country Court, partnerships with state and local agencies and industry groups should be established and are critical to success.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineation is near urban and residential land use areas. Public education topics could include proper lawn and garden care practices, household hazardous waste disposal methods, proper care and maintenance of septic systems, and the importance of conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA. There are transportation corridors near the delineation, therefore the Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A system must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (e.g. zoning, permitting) or non-regulatory in nature (e.g. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Twin Falls Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR THE MOBILE HOME COUNTRY COURT, BURLEY, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached. The list of significant potential contaminant source categories and their rankings, used to develop this assessment, is also attached.

Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the EPA to assess the over 2,900 public drinking water sources in Idaho for their relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area, sensitivity factors associated with the wells, and aquifer characteristics. All assessments must be completed by May of 2003. The resources and time available to accomplish assessments are limited. Therefore, an in-depth, site-specific investigation to identify each significant potential source of contamination for every public water system is not possible. **This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of this assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a drinking water protection program should be determined by the local community based on its own needs and limitations. Drinking water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The Mobile Home Country Court (PWS #5160032) water system consists of one well. The well is located on the west side of Highway 27 approximately 3.5 miles south of the city of Burley (Figure 1). The system currently serves approximately 50 people through 22 connections.

No VOCs have ever been detected in the well or its distribution system. Trace amounts of the IOCs barium, chromium, and fluoride have been detected in tested water, but significantly below MCLs. A detection (November 1993) of antimony occurred at 0.014 ppm, above its MCL of 0.006 ppm. A detection of the SOC aldrin occurred in November 1993 in concentrations of 1.33 ppb. EPA has not set an MCL for aldrin. The well exists in a county of high nitrogen fertilizer, herbicide, and agricultural chemical use. In addition, the well's delineation crosses a priority area for the pesticide atrazine and the IOC nitrate. Despite regional nitrate use, tested well water has only detected concentrations between 2.94 and 3.72 parts per million ppm, significantly below the MCL of 10ppm.

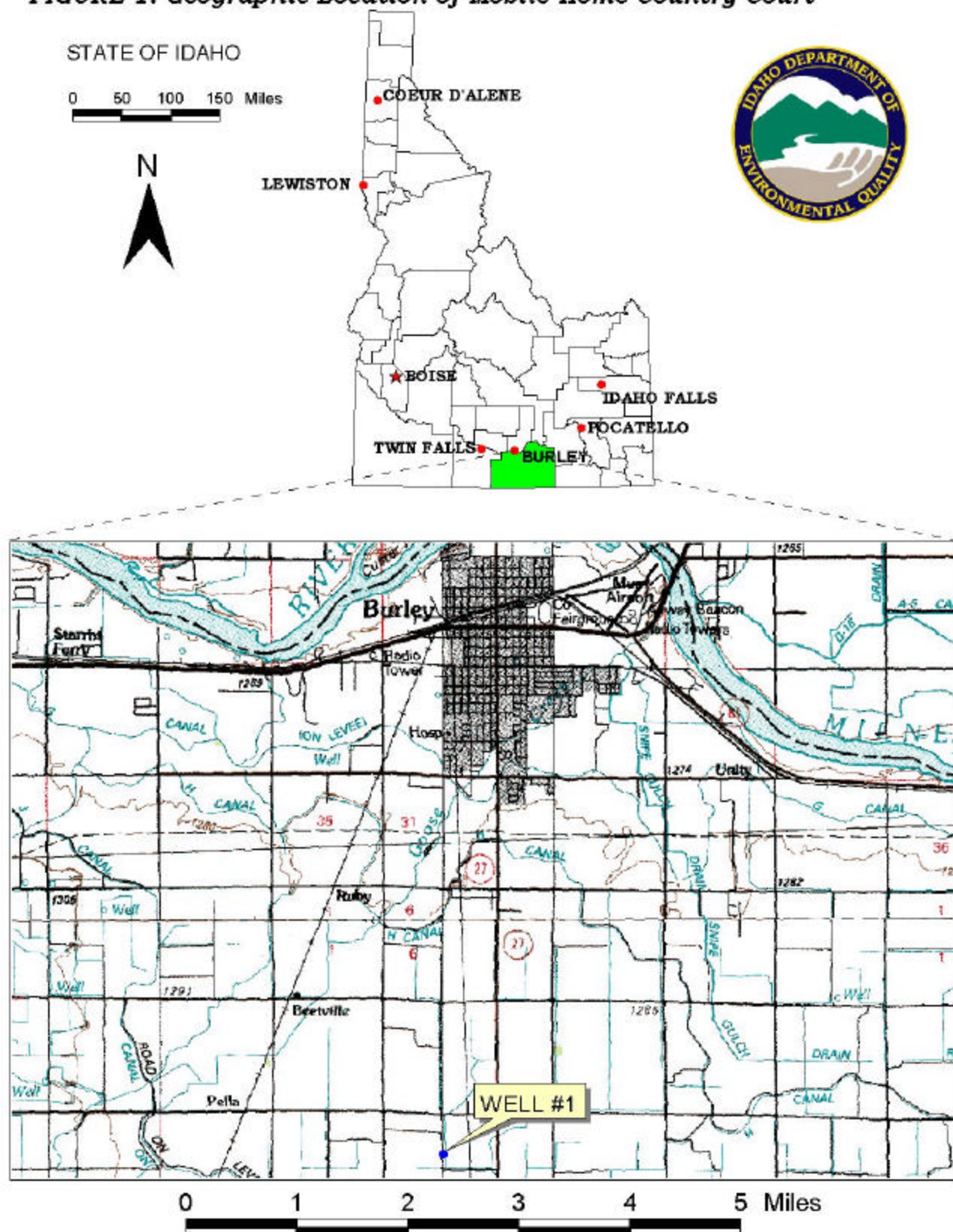
Defining the Zones of Contribution – Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time-of-travel zones (zones indicating the number of years necessary for a particle of water to reach a well) for water in the aquifer. DEQ used a refined computer model approved by the EPA in determining the time-of-travel (TOT) zones for water associated with the Goose Creek – Golden Valley aquifer in the vicinity of the Mobile Home Country Court. The computer model used site-specific data, assimilated by DEQ from a variety of sources including local area well logs and hydrogeologic reports summarized below.

The well extracts water from the shallow alluvium overlying the basalt of the Snake River Group. This shallow aquifer is the same one that the City of Burley uses for its many irrigation wells. The alluvium of this aquifer is recharged by irrigation return flow, leakage from streams and canals flowing through the area, and precipitation. In addition, a stretch of the Snake River to the east of Burley contributes water to the shallow alluvium. While some of the perched aquifer water of the Burley Irrigation District discharges to drains and the Snake River, the bulk of the water recharges to main water table of the basalt (Crosthwaite, 1969).

Twenty-four years of records since 1964 set the average yearly rainfall in Burley at 8.6 inches (Crosthwaite, 1969). The Albion Range and the fault zone at its base bound the plain on the southeast and the Rock Creek Hills bound the plain on the southwest. The lowland slopes northward from an altitude of about 4,600 feet at Oakley to 4,150 feet at Burley (Crosthwaite, 1969).

FIGURE 1. Geographic Location of Mobile Home Country Court



Quaternary alluvium consists mostly of clay, silt, sand, and gravel. The unit ranges from unconsolidated to well compacted and is poorly sorted, leading to the poor drainage condition. South of Burley, alluvium deposited by the Snake River interfingers with alluvium deposited by Goose Creek. The thickness of the unit ranges from 1 to 300 feet (Young and Newton, 1989).

The delineated source water assessment area for the Mobile Home Country Court well can best be described as a southeast trending corridor approximately 5 miles long and 2.5 miles (Figure 2). The data used by DEQ in determining the source water assessment delineation areas are available upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by DEQ, Mobile Home Country Court, and from available databases.

It is important to understand that a release may never occur from a potential source of contamination provided best management practices are used at the facility. Many potential sources of contamination are regulated at the federal level, state level, or both, to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, such as educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply well.

Contaminant Source Inventory Process

A contaminant inventory of the study area was conducted in June and July of 2001. This involved identifying and documenting potential contaminant sources within the Mobile Home Country Court Source Water Assessment Areas through the use of computer databases and Geographic Information System maps developed by DEQ.

The well's delineation contains 4 potential contaminant sources (See Table 1). These potential contaminant sources include dairies and an area with elevated levels of contaminants (Group 1 site). In addition, the canal and Highway 27 exist within the delineation. If an accidental spill occurred in one of these sources, IOCs, VOCs, SOCs, or microbial contaminants could be added to the aquifer system.

Table 1. Mobile Home Country Court, Main Well and Railroad Well, Potential Contaminant Inventory

SITE #	Source Description ¹	TOT Zone ² (years)	Source of Information	Potential Contaminants ³
1	Group 1 site	0 – 3 YR	Database Search	SOC
2	Dairy; <=200 cows	3 – 6 YR	Database Search	IOC, SOC
3	Dairy; <=200 cows	3 – 6 YR	Database Search	IOC, SOC
4	Dairy; <=200 cows	3 – 6 YR	Database Search	IOC, SOC
	Highway 27	0 – 3 YR	GIS Map	IOC, VOC, SOC, Microbial
	Canals	6 – 10 YR	GIS Map	IOC, VOC, SOC

¹ Group 1 = Sites that show elevated levels of contaminants and are not within the Priority 1 areas

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Section 3. Susceptibility Analyses

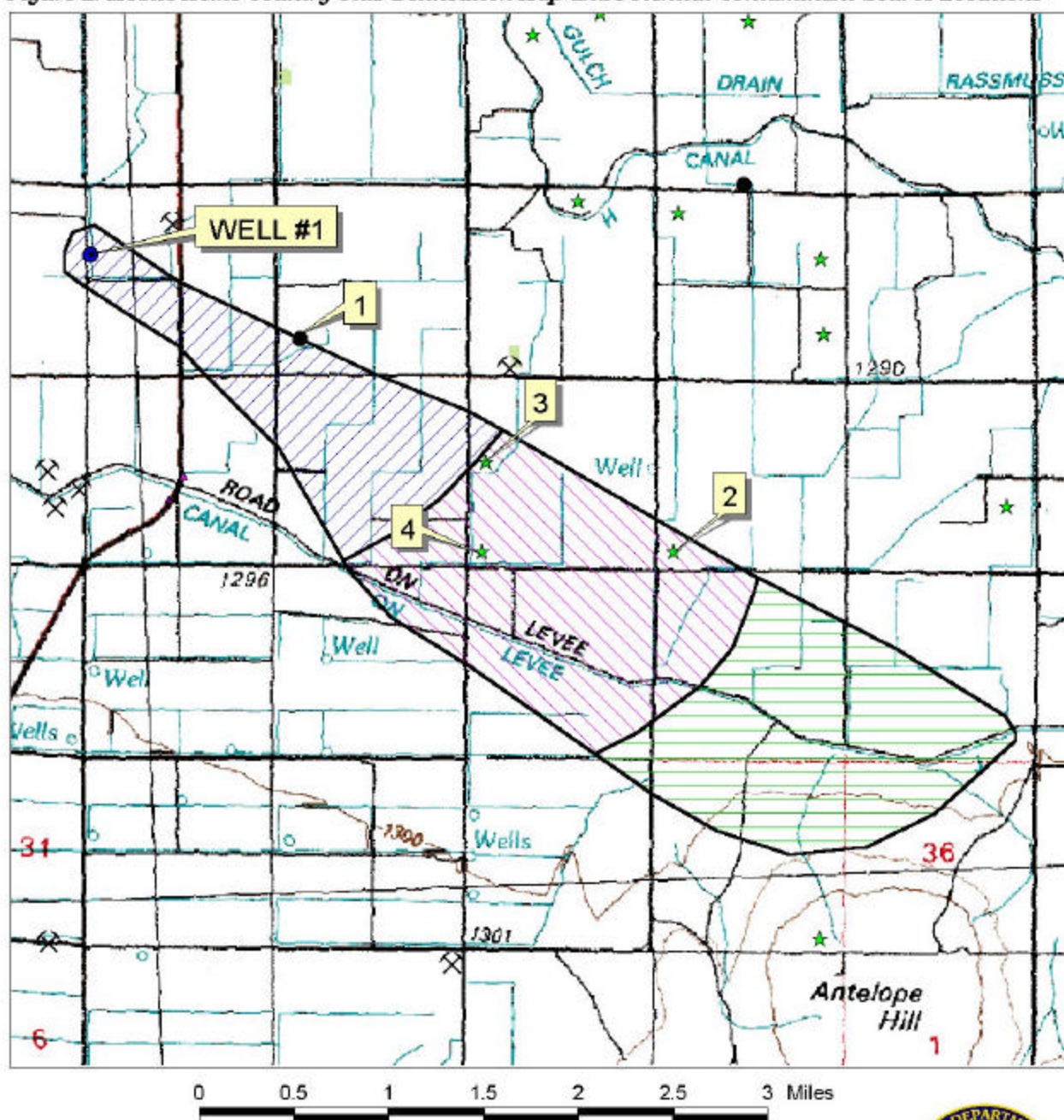
The water system's susceptibility to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the well, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment A contains the susceptibility analysis worksheets. The following summaries describe the rationale for the susceptibility ranking.

Hydrologic Sensitivity

The hydrologic sensitivity of a well is dependent upon four factors: the surface soil composition, the material in the vadose zone (between the land surface and the water table), the depth to first ground water, and the presence of a 50-foot thick fine-grained zone above the producing zone of the well. Slowly draining soils such as silt and clay typically are more protective of ground water than coarse-grained soils such as sand and gravel. Similarly, fine-grained sediments in the subsurface and a water depth of more than 300 feet protect the ground water from contamination.

The hydrologic sensitivity was moderate for the well (see Table 2). Soils surrounding the well are described as poorly- to moderately-drained by the National Resource Conservation Service (NRCS), which inhibits the downward movement of contaminants. Scores were increased because the composition of the vadose zone, the water table depth, and possible presence of an aquitard is unknown. The unknown information would have been derived from data contained on the well log. Ratings containing missing information receive the most conservative (ie. highest) score. If a well log would have been available, hydrologic sensitivity scores might have been lower.

Figure 2. Mobile Home Country Club Delineation Map and Potential Contaminant Source Locations



PWS# 5160032
WELL #1

Well Construction

Well construction directly affects the ability of the well to protect the aquifer from contaminants. System construction scores are reduced when information shows that potential contaminants will have a more difficult time reaching the intake of the well. Lower scores imply a system is less vulnerable to contamination. For example, if the well casing and annular seal both extend into a low permeability unit, then the possibility of contamination is reduced and the system construction score goes down. If the highest production interval is more than 100 feet below the water table, then the system is considered to have better buffering capacity. If the wellhead and surface seal are maintained to standards, as outlined in Sanitary Surveys, then contamination down the well bore is less likely. If the well is protected from surface flooding and is outside the 100-year floodplain, then contamination from surface events is reduced.

The system construction score was high for the well (see Table 2). The GIS map illustrates that the well is located outside of the 100 year floodplain and the 1993 sanitary survey noted the wellhead is protected from surface flooding. The score was increased because the 1993 sanitary survey noted the wellhead and surface seal were not maintained to standard (chemicals stored in well house, wellhead not in well house). The score was also increased because the missing well log prevented determining if the highest production of water came from more than 100 feet below static water level or if the casing and annular seal into low permeability units. Missing information results in related scores receiving the highest available ratings. If a well log had been available, the construction score might have been lower.

The Idaho Department of Water Resources *Well Construction Standards Rules* (1993) require all Public Water Systems (PWSs) to follow DEQ standards as well. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works* (1997) during construction. Some of the requirements include casing thickness, well tests, and depth and formation type that the surface seal must be installed into. Table 1 of the *Recommended Standards for Water Works* (1997) lists the required steel casing thickness for various diameter wells. Six inch diameter wells require a casing thickness of at least 0.280-inches. Well tests are required at the design pumping rate for 24 hours or until stabilized drawdown has continued for at least six hours when pumping at 1.5 times the design pumping rate. The well received an additional point in the system construction category because it was unknown if the well meets current construction standards. Although the well may have met standards when it was constructed, current regulations are stricter.

Potential Contaminant Source and Land Use

The well rated high for IOCs (e.g. arsenic, nitrate), moderate for SOCs (e.g. pesticides), high for VOCs (e.g. petroleum products), and low for microbial contaminants (e.g. bacteria)(Table 2). The potential contaminant sources, canal, transportation corridor, and the amount of irrigated agriculture contributed to the contaminant inventory ratings. County level nitrogen fertilizer use, county level herbicide use, and total county level agricultural chemical use are rated as high surrounding the well.

Final Susceptibility Rating

An IOC detection above a drinking water standard MCL, any detection of a VOC or SOC, or a detection of total coliform bacteria or fecal coliform bacteria at the wellhead will automatically give a high susceptibility rating to a well, despite the land use of the area, because a pathway for contamination already exists. Additionally, the storage or application of any potential contaminants within 50 feet of the wellhead will lead to an automatic high score. In this case, the well rated automatically high for IOCs, VOCs, SOCs, and microbials due to the sanitary setback distance of 50 feet not being kept clear of all potential contaminants (irrigation canal 25 feet away, paint and antifreeze stored in the well house, herbicide sprayed on canal bank and in garden), a septic tank existing within 100 feet of the well, a detection (November 1993) of antimony above its MCL, and detections of total coliform and E.coli in the well. Hydrologic sensitivity and system construction scores are heavily weighted in the final scores. Having multiple potential contaminant sources in the 0- to 3-year time-of-travel zone (Zone 1B) and much agricultural land contribute greatly to the overall ranking.

Table 2. Summary of the Mobile Home Country Court Susceptibility Evaluation

Source	Susceptibility Scores ¹									
	Hydrologic Sensitivity	Contaminant Inventory				System Construction	Final Susceptibility Ranking			
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
Well #1	M	H	M	H	L	H	H*	H*	H*	H*

¹H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

H*= Automatic high due to the sanitary setback distance of 50 feet not being kept clear of all potential contaminants (irrigation canal 25 feet away, paint and antifreeze stored in the well house, herbicide sprayed on canal bank and in garden), a septic tank existing within 100 feet of the well, a detection (November 1993) of antimony above its MCL, and detections of total coliform and E.coli in the well.

Susceptibility Summary

In terms of total susceptibility, the well rated automatically high for IOCs, VOCs, SOCs, and microbial contaminants. The automatically high ratings are due to the sanitary setback distance of 50 feet not being kept clear of all potential contaminants (irrigation canal 25 feet away, paint and antifreeze stored in the well house, herbicide sprayed on canal bank and in garden), a septic tank existing within 100 feet of the well, and detections of total coliform and E.coli in the well. System construction rated high, hydrologic sensitivity rated moderate, and land use scores were high for IOCs, moderate for VOCs, high for SOCs, and low for microbial contaminants.

No VOCs have ever been detected in the well or its distribution system. Trace amounts of the IOCs barium, chromium, antimony, and fluoride have been detected in tested water, but significantly below MCLs. A detection (November 1993) of antimony occurred at 0.014 ppm, above its MCL of 0.006 ppm. A detection of the SOC aldrin occurred in November 1993 in concentrations of 1.33 ppb. EPA has not set an MCL for aldrin. The well exists in a county of high nitrogen fertilizer, herbicide, and ag-chemical use. In addition, the well's delineation crosses a priority area for the pesticide atrazine and the IOC nitrate. Despite regional nitrate use, tested well water has only detected concentrations between 2.94 and 3.72 ppm, significantly below the MCL of 10ppm.

Section 4. Options for Drinking Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed drinking water protection program will incorporate many strategies, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For Mobile Home Country Court, drinking water protection activities should first focus on maintaining the requirements of the sanitary survey. Any spills from the potential contaminant sources listed in Table 1 of this report should be carefully monitored, as should any future development in the delineated areas. Other practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas should be implemented. No chemicals should be stored or applied within the 50-foot radius of the wellhead. As most of the designated areas are outside the direct jurisdiction of the Mobile Home Country Court, partnerships with state and local agencies and industry groups should be established and are critical to success.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineation is near urban and residential land use areas. Public education topics could include proper lawn and garden care practices, household hazardous waste disposal methods, proper care and maintenance of septic systems, and the importance of conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the U.S. Environmental Protection Agency. There are transportation corridors near the delineation, therefore the Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A system must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Twin Falls Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

Assistance

Public water suppliers and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Twin Falls Regional DEQ Office (208) 736-2190

State DEQ Office (208) 373-0502

Website: <http://www.deq.state.id.us>

Water suppliers serving fewer than 10,000 persons may contact Ms. Melinda Harper, <mailto:mlharper@idahoruralwater.com> , Idaho Rural Water Association, at 208-343-7001 for assistance with drinking water protection strategies.

POTENTIAL CONTAMINANT INVENTORY

LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as ASuperfund, is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100-year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

References Cited

Crosthwaite, E.G., 1969. *Water Resources in the Goose Creek-Rock Creek Basins, Idaho, Nevada and Utah*. prepared by the U.S. Geological Survey in cooperation with Idaho Department of Reclamation, Water Information Bulletin No. 8.

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Attachment A

Mobile Home Country Court Susceptibility Analysis Worksheets

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

≥ 13 High Susceptibility

1. System Construction		SCORE			
Drill Date	unknown				
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES	1993			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	NO	1			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		5			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	YES	0			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	YES	YES	YES	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	1	1	2	1
(Score = # Sources X 2) 8 Points Maximum		2	2	4	2
Sources of Class II or III leacheable contaminants or	YES	5	1	1	
4 Points Maximum		4	1	1	
Zone 1B contains or intercepts a Group 1 Area	YES	2	0	2	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		12	7	11	6
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		24	17	23	8
4. Final Susceptibility Source Score		14	12	14	12
5. Final Well Ranking		High	High	High	High